# RECLANIATION Managing Water in the West

MT DROUGHT ADVISORY COMMITTEE MEETING

RESERVOIR AND RIVER OPERATIONS



**August 18, 2005** 







U.S. Department of the Interior **Bureau of Reclamation** 

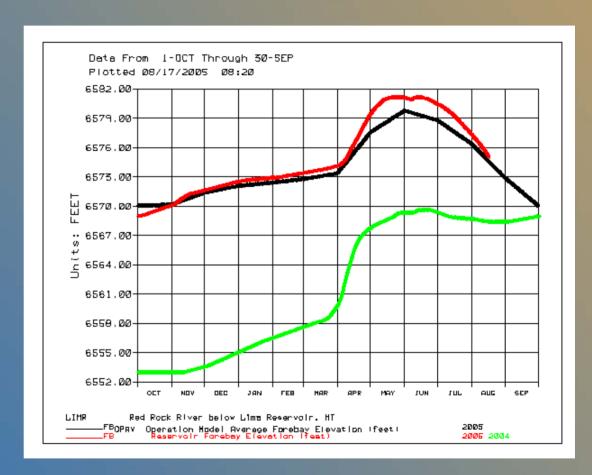
#### Lima Reservoir

July inflow dropped to 80% of average

Storage is at 46,000 af (108% of average) & about 7.7 feet below full pool

Releases are being maintained at 365 cfs to meet irrigation demands

Return flows are picking up, allowing inflows to Clark Canyon to remain over 200 cfs



## Clark Canyon Reservoir

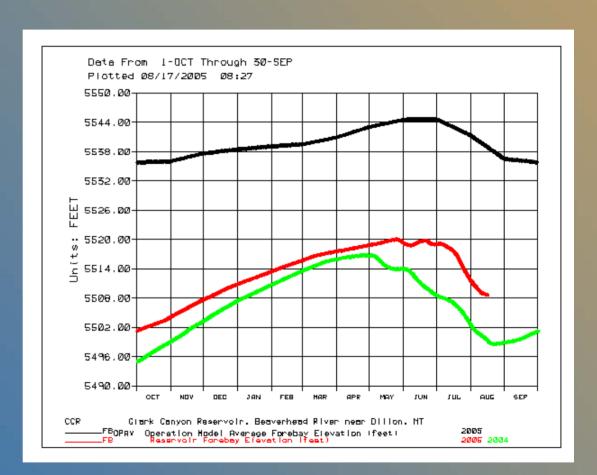
July inflow improved to 51% of average

Storage is at 38,142 af (28% of average), about 16,495 af or 9.4 feet higher than last year

Releases are being maintained at 270 cfs to meet downstream irrigation demands

Improved runoff this spring has allowed EBID & CCWSC to work out an arrangement to deliver 30,000 acre-feet of water to EBID this past year.

Irrigation deliveries will be discontinued shortly after Labor Day weekend.



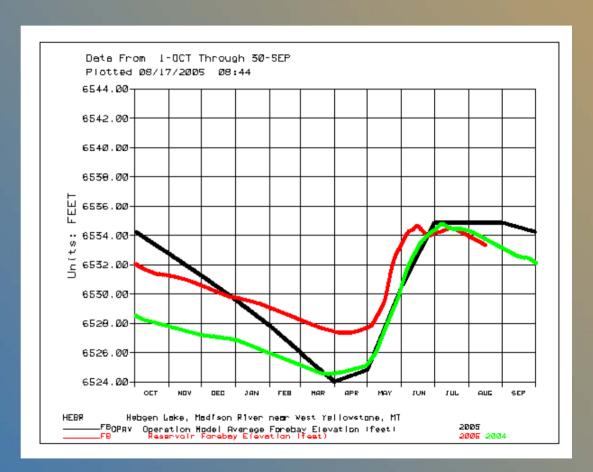
# Hebgen Reservoir (PPL-MT)

July inflow was 84% of average

Storage is at 94% of average, about 1.5 feet below normal full pool

**Currently releasing 1,030 cfs to Madison River** 

To maintain cooler water temperatures in the river, pulse flow operations are proceeding, resulting in operations closely resembling last years operations



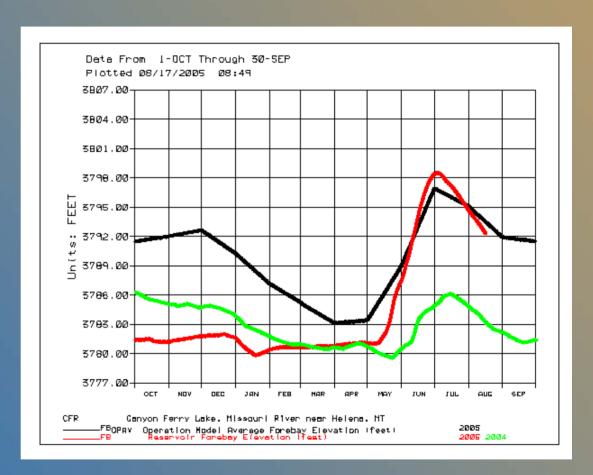
## Canyon Ferry Reservoir

July inflow dropped to 60% of average

Storage is at 98% of average, about 4.7 feet below normal full pool

Releases to the Missouri River are being maintained at the desired minimum flow of 4,100 cfs below Holter Dam

Hope to maintain river flows at 4,100 for the remainder of the year



#### Gibson Reservoir

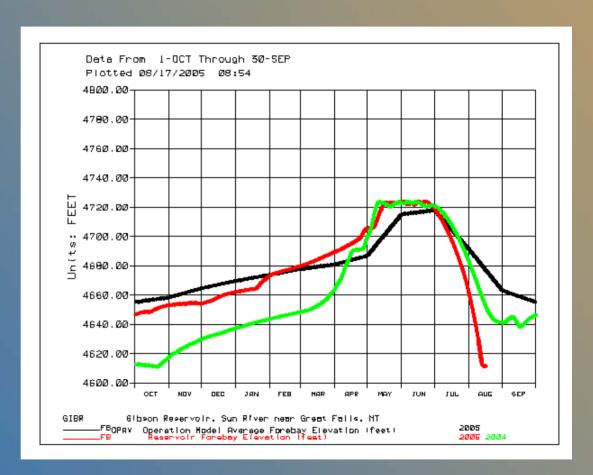
July inflow was 51% of average

All storage has been evacuated, with storage at only 13% of average

Releasing 100 cfs to Sun River and 160 cfs to the canal

Water users are experiencing some minor water shortages

Plans are to reduce river flows to 50 cfs and later divert flows to Pishkun & Willow Creek to refill them



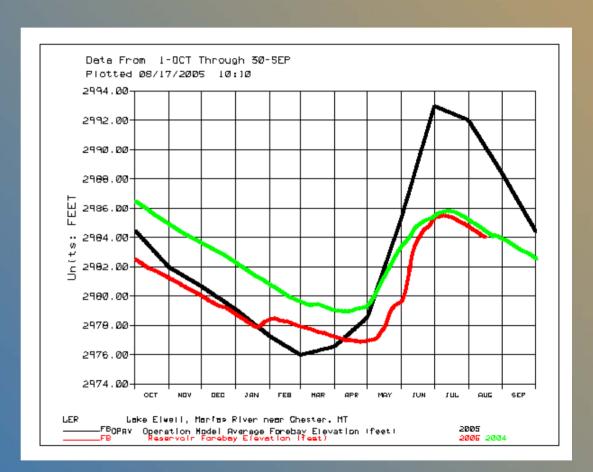
## Lake Elwell (Tiber Reservoir)

July inflow was 27% of average, the 10<sup>th</sup> lowest of record

Storage is 89% of average and 0.40 feet lower than at this time last year

Releases are being maintained at 400 cfs to conserve storage for later use

Plan to hold fall & winter releases at 400 cfs unless inflows continue to remain near where they are then they may be reduced further to 320 cfs



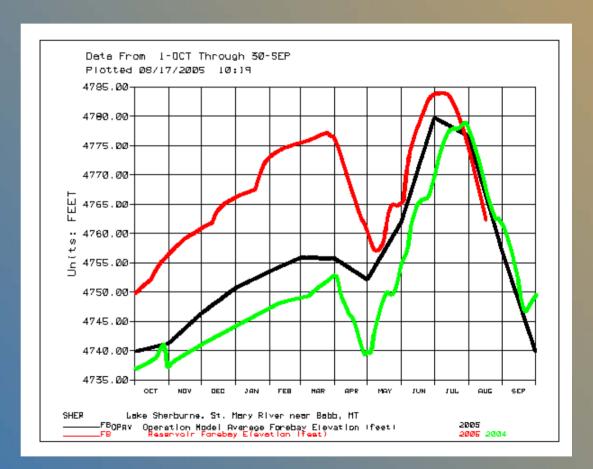
#### Lake Sherburne

July inflow was 57% of average

Storage is at 87 percent of average, about 5.3 feet lower than at this time last year

Releases from Sherburne Lake are currently being maintained at 600 cfs

Diversions from the St. Mary River Basin to the Milk River Basin are continuing at a rate of 600 cfs



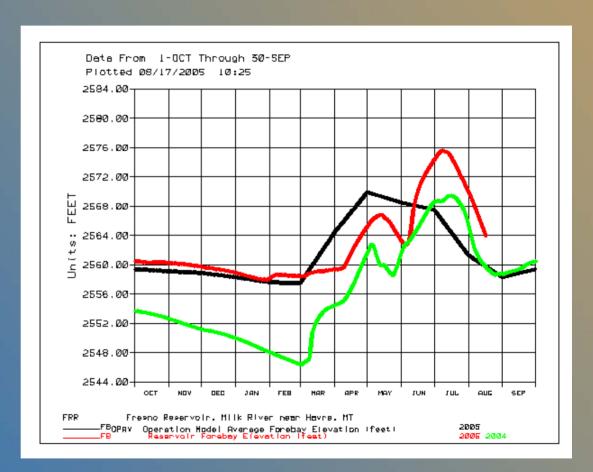
#### Fresno Reservoir

**Currently diverting 600 cfs from St. Mary Basin to Milk River** 

Storage is at 126% of average and is 4.3 feet higher than at this time last year

Due to the spring and summer rains experienced this year, there are no water shortages anticipated this year

Recent rains have allowed irrigators to increase their earlier irrigation allotments from 1.3 af/ac to at least 2.0 af/ac



# Bighorn Lake (Yellowtail Reservoir)

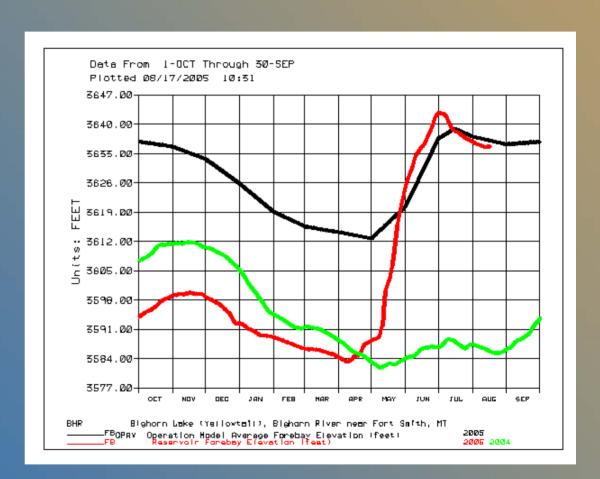
July inflow dropped to 59% of average

Storage is at 98% of average and 5.4 feet below the top of the conservation pool at elevation

Storage is 45 feet higher than at this time last year

Releases to the Bighorn River are being maintained at 2,500 cfs, the desired minimum for the river fishery

Bighorn Lake reached the top of the conservation pool on June 26 and rose 2.8 feet into the exclusive flood pool



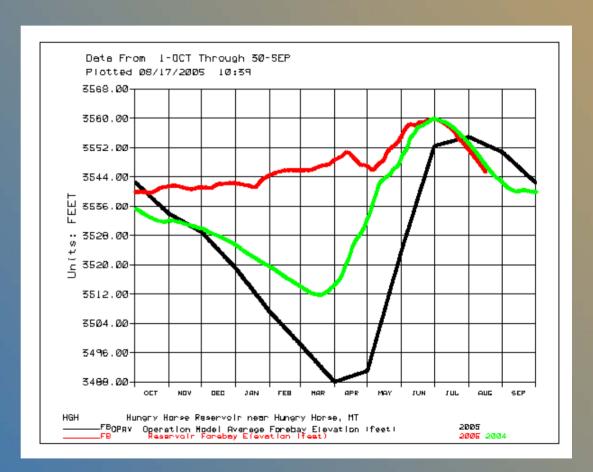
# **Hungry Horse Reservoir**

Streamflow into Hungry Horse were below normal during July

Storage is below average for this time of year

Currently releasing about 5,240 cfs to river

Storage in Hungry Horse filled to the top of the conservation pool and is expected to continue dropping throughout the remainder of the year



#### Reservoir Conditions for Reclamation Reservoirs

# BUREAU OF RECLAMATION MONTANA AREA OFFICE RESERVOIR OPERATIONS REPORT 16-Aug-2005 ALL CONTENTS IN ACRE-FEET

				RESERVOIR CONDITIONS							WATER SUPPLY OUTLOOK						
				ELEVA	ATTION	CAPACITY					MIN SNOW WATER CONTENT				AUGUST RUNOFF		
				(FEET)		(ACRE-FEET)		2005			(INCHES)				AUGUST 1st FORECAST		
	NORMAL	TOTAL	AVERAGE					%	%Œ	%Œ				%Œ			%Œ
RESERVOIR NAME	FULLPOOL	CAPACITY	CAPACITY	2004	2005	2004	2005	FULL	AVG	Last Yr	2004	2005	AVG	AVG	(KAF)	AVG	AVG
CLARK CANYON	5546.10	174,368	138,558	5499.20	5508.60	21,647	38,142	22	28	176	0.00	0.03	0.00	0	NA	NA	NA
CANYON FERRY	3797.00	1,891,888	1,775,393	3783.21	3792.31	1,452,586	1,737,907	92	98	120	0.00	0.03	0.01	461	NA	NA	NA
GIBSON	4724.00	96,477	44,285	4652.17	4611.28	25,975	5,729	6	13	22	0.00	#######################################	0.00	0	NA	NA	NA
PISHKUN	4370.00	46,670	36,211	4370.76	4360.59	47,909	33,595	72	93	70	NA	NA	NA	NA	NA	NA	NA
WILLOWCREEK	4142.00	32,300	21,362	4132.77	4131.37	19,969	18,317	57	86	92	NA	NA	NA	NA	NA	NA	NA
LAKE ELWELL	2993.00	967,319	917,075	2984.44	2983.97	823,890	816,479	84	89	99	0.00	0.00	0.00	0	NA	NA	NA
SHERBURNE	4788.00	67,854	36,752	4767.66	4762.34	38,245	32,003	47	87	84	0.00	#######################################	0.00	0	NA	NA	NA
FRESNO	2575.00	92,880	40,681	2559.69	2563.95	40,537	51,303	55	126	127	NA	NA	NA	NA	NA	NA	NA
NELSON	2221.60	78,951	54,533	2215.54	2213.10	55,167	46,958	59	86	85	NA	NA	NA	NA	NA	NA	NA
BIGHORNLAKE	3640.00	1,070,029	1,023,774	3585.67	3634.63	669,659	1,006,991	94	98	150	0.00	0.04	0.00	0	NA	NA	NA

#### **Summary of Operations of Reclamation Projects**

5<sup>th</sup> wettest June on record helped reduce demands tremendously.

Reduced demands left more water in the streams, improving inflows to Reclamation reservoirs.

Streamflows improved considerably this spring but many of the streams are currently well below normal.

July inflows to Reclamation projects varied from 27% of average @ Tiber to 93% of average at Fresno.

All Reclamation reservoirs in Montana filled except for Clark Canyon, Lake Elwell, Lake Sherburne & Nelson Reservoirs.

Dry conditions during July placed a heavy demand on stored water and caused storage levels in many Reclamation reservoirs to decline significantly during July and August, varying from 13% of average at Gibson to 126% at Fresno.

Hope to maintain fall and winter streamflows below Reclamation Projects at desirable levels for downstream river fisheries, except for the Tiber (400 cfs in Marias) and Clark Canyon (25-35 cfs in Beaverhead).

# Thank You! Love You Have An Enjoyable Surring !!